WHAT IS CLAIMED IS:

1. A decoding control apparatus for controlling a process to decode encoded data obtained as a result of a predictive encoding process, said decoding control apparatus comprising:

a picture detector for determining one or fewest possible pictures, which must be decoded first before decoding a picture to be displayed after an edit point set in said encoded data but are not to be displayed;

a start-point finder for finding a start point representing a timing to start a process to decode said one or fewest possible pictures determined by said picture detector even though said one or fewest possible pictures are not to be displayed;

a decoding controller for controlling processes, which are carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data, in picture units, on the basis of said start point; and

a selector for selecting one of pictures, which are obtained as results of said processes carried out by said decoders, on the basis of said edit point and for outputting said selected picture.

2. The decoding control apparatus according to

claim 1, further comprising an edit-point detector for detecting said edit point set in said encoded data.

3. The decoding control apparatus according to claim 1, wherein said decoders are employed in said decoding control apparatus.

4. The decoding control apparatus according to claim 1, wherein, if said encoded data is encoded at an L-time decoding speed, where L is a positive number, the number of said decoders is at least 7/L.

5. The decoding control apparatus according to claim 1, wherein said start-point finder determines a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

6. The decoding control apparatus according to claim 1, wherein said encoded data is data generated by encoding pictures in unit of a group including a plurality of pictures.

7. The decoding control apparatus according to claim 1, wherein:

each of said pictures include:

an Intra (I) picture encoded without referencing other pictures;

a Predictive (P) picture encoded by referencing a picture displayed previously; or

a Bidirectionally predictive (B) picture encoded by referencing both a picture displayed previously and a picture to be displayed later, or by referencing either of the picture displayed previously or the picture to be displayed later;

said one or fewest possible pictures, which are identified by said picture detector but not to be displayed, are I or P pictures.

8. The decoding control apparatus according to claim 1, wherein said decoding controller:

drives one of said decoders, which is currently not carrying out a decoding process, to start a process to decode said encoded data with a timing of a new start point; and

drives said one of decoders, which has been carrying out said process to decode said encoded data by starting said process with said timing of said new start point, to stop said process to decode said encoded data with a timing of an edit point appearing next to said new start point.

9. The decoding control apparatus according to claim 8, wherein with said timing of an edit point appearing next to said new start point, said selector starts selecting pictures obtained as a result of said decoding process carried out by said one of said decoders, which has been carrying out said decoding process by starting said decoding process with said timing of said new start point.

10. The decoding control apparatus according to claim 1, said decoding control apparatus further comprising a reader for reading out said encoded data from a recording medium, on which said encoded data has been stored.

11. A decoding control method for controlling a process to decode encoded data obtained as a result of a predictive encoding process, said decoding control method comprising the steps of:

determining one or fewest possible pictures, which must be decoded first before decoding a picture to be displayed after an edit point set in said encoded data but are not to be displayed;

finding a start point representing a timing to start a process to decode said one or fewest possible pictures even though said one or fewest possible pictures

are not to be displayed;

controlling processes, which are carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data, in picture units, on the basis of said start point; and

selecting one of pictures, which are obtained as results of said processes carried out by said decoders, on the basis of said edit point.

12. The decoding control method according to claim 11, further comprising the step of detecting said edit point set in said encoded data.

13. The decoding control method according to claim 11 whereby, at said step of finding a start point, an operation is carried out to determine a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

14. The decoding control method according to claim 11 whereby, at said step of controlling processes,

one of said decoders, which is currently not carrying out a decoding process, is driven to start a

process to decode said encoded data with a timing of a new start point; and

said one of decoders, which has been carrying out said process to decode said encoded data by starting said process with said timing of said new start point, is driven to stop said process to decode said encoded data with a timing of an edit point appearing next to said new start point.

15. The decoding control method according to claim 14 whereby, with said timing of an edit point appearing next to said new start point, at said step of selecting one of pictures, an operation is started to select pictures obtained as a result of said decoding process carried out by said one of decoders, which has been carrying out said decoding process by starting said decoding process with said timing of said new start point.

16. The decoding control method according to claim 11, said decoding control method further comprising the step of reading out said encoded data from a recording medium, on which said encoded data has been stored.

17. A program for driving a computer to carry out a decoding control process to control a process of decoding encoded data obtained as a result of a predictive encoding process wherein said decoding control

process comprises the steps of:

determining one or fewest possible pictures, which must be decoded first before decoding a picture to be displayed after an edit point set in said encoded data but are not to be displayed;

finding a start point representing a timing to start a process to decode said one or fewest possible pictures even though said one or fewest possible pictures are not to be displayed;

controlling processes, which are carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data, in picture units, on the basis of said start point; and

selecting one of pictures, which are obtained as results of said processes carried out by said decoders, on the basis of said edit point.

18. The program according to claim 17, wherein said decoding control process further comprises the step of detecting said edit point set in said encoded data.

19. The program according to claim 17, wherein at said step of finding a start point, an operation is carried out to determine a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to

decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

20. The program according to claim 17, wherein at said step of controlling processes,

one of said decoders, which is currently not carrying out a decoding process, is driven to start a process to decode said encoded data with a timing of a new start point; and

said one of decoders, which has been carrying out said process to decode said encoded data by starting said process with said timing of said new start point, is driven to stop said process to decode said encoded data with a timing of an edit point appearing next to said new start point.

21. The program according to claim 20, wherein with said timing of an edit point appearing next to said new start point, at said step of selecting one of pictures, an operation is started to select pictures obtained as a result of said decoding process carried out by said one of decoders, which has been carrying out said decoding process by starting said decoding process with said timing of said new start point.

22. The program according to claim 17 wherein said decoding control process further comprises the step of reading out said encoded data from a recording medium, on which said encoded data has been stored.

23. An information-processing apparatus comprising:

a picture detector for determining one or fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after an edit point described on an edit-point list, that is, a list of said edit point set in encoded data obtained as a result of a predictive encoding process;

a start-point finder for finding a start point representing a timing to start a process to decode said one or fewest possible pictures determined by said picture detector even though said one or fewest possible pictures are not to be displayed; and

a decoding control list maker for making a decoding control list describing at least said edit point and said start point as decoding control information for controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data.

24. The information-processing apparatus according to claim 23, further comprising an edit-point detector for detecting said edit point set in said encoded data.

25. The information-processing apparatus according to claim 23, wherein said start-point finder determines a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

26. The information-processing apparatus according to claim 23, wherein said encoded data is data generated by encoding pictures in unit of a group including a plurality of pictures.

27. The information-processing apparatus according to claim 23 wherein:

each of said pictures include:

an Intra (I) picture encoded without referencing other pictures;

a Predictive (P) picture encoded by referencing a picture displayed previously; or

a Bidirectionally predictive (B) picture encoded by referencing both a picture displayed previously and a

picture to be displayed later, or by referencing either of the picture displayed previously or the picture to be displayed later;

said one or fewest possible pictures, which are identified by said picture detector but not to be displayed, are I or P pictures.

28. The information-processing apparatus according to claim 23, wherein said decoding control list made by said decoding control list maker includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning from said start point as said decoding control information.

29. An information-processing method comprising the steps of:

detecting one or fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after an edit point described on an edit-point list, that is, a list of said edit point set in encoded data obtained as a result of a predictive encoding process;

finding a start point each representing a timing to start a process to decode said one or fewest possible pictures determined by said picture detector even though said one or fewest possible pictures are not to be

displayed; and

making a decoding control list describing at least said edit point and said start point as decoding control information for controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data.

30. The information-processing method according to claim 29, said information-processing method further comprising the step of detecting said edit point set in said encoded data.

31. The information-processing method according to claim 29 whereby, at said step of finding a start point, an operation is carried out to determine a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

32. The information-processing method according to claim 29, wherein said decoding control list made at said step of making a decoding control list includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning

from said start point as said decoding control information.

33. A program for driving a computer to carry out a predetermined process, said program comprising the steps of:

determining one or fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after an edit point described on an edit-point list, that is, a list of said edit point set in encoded data obtained as a result of a predictive encoding process;

finding a start point each representing a timing to start a process to decode said one or fewest possible pictures determined by said picture detector even though said one or fewest possible pictures are not to be displayed; and

making a decoding control list describing at least said edit point and said start point as decoding control information for controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data.

34. The program according to claim 33, said program further comprising the step of detecting said edit point set in said encoded data.

35. The program according to claim 33, wherein at said step of finding a start point, an operation is carried out to determine a timing leading ahead of a timing to start a process to decode a picture at said edit point by at least a period of time it takes to decode all of said one or fewest possible pictures, which are determined by said picture detector, for said edit point, as pictures not to be displayed, as said start point.

36. The program according to claim 33, wherein said decoding control list made at said step of making a decoding control list includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning from said start point as said decoding control information.

37. A decoding control apparatus for controlling a process to decode encoded data obtained as a result of a predictive encoding process, said decoding control apparatus comprising:

a decoding controller for controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data in picture units on the basis of a decoding control list describing at least an edit point set in said encoded

data and a start point representing a timing to start a process to decode fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after said edit point, as decoding control information for controlling said processes carried out by said decoders for decoding said encoded data in order to decode said encoded data; and

a selector for selecting one of pictures, which are obtained as results of said processes carried out by said decoders, on the basis of said decoding control list and for outputting said selected picture.

38. The decoding control apparatus according to claim 37 wherein said decoders are employed in said decoding control apparatus.

39. The decoding control apparatus according to claim 37, wherein if said encoded data is encoded at an L-time decoding speed, where L is a positive number, the number of said decoders is at least 7/L.

40. The decoding control apparatus according to claim 37, wherein said encoded data is data generated by encoding pictures in unit of a group including a plurality of pictures.

41. The decoding control apparatus according to claim 37, wherein:

each of said pictures include:

an Intra (I) picture encoded without referencing other pictures;

a Predictive (P) picture encoded by referencing a picture displayed previously; or

a Bidirectionally predictive (B) picture encoded by referencing both a picture displayed previously and a picture to be displayed later, or by referencing either of the picture displayed previously or the picture to be displayed later;

said one or fewest possible pictures, which are identified by said picture detector but not to be displayed, are I or P pictures.

42. The decoding control apparatus according to claim 37, said decoding control apparatus further comprising a reader for reading out said encoded data from a recording medium, on which said encoded data has been stored.

43. The decoding control apparatus according to claim 37, wherein said decoding control list includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning from said start point as said decoding control information.

44. A decoding control method for controlling a process to decode encoded data obtained as a result of a predictive encoding process, said decoding control method comprising the steps of:

controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data in picture units on the basis of a decoding control list describing at least an edit point set in said encoded data and a start point representing a timing to start a process to decode fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after said edit point as decoding control information for controlling said processes carried out by said decoders for decoding said encoded data in order to decode said encoded data; and

selecting one of pictures, which are obtained as results of said processes carried out by said decoders, on the basis of said decoding control list and outputting said selected picture.

45. The decoding control method according to claim 44, said decoding control method further comprising the step of reading out said encoded data from a recording medium, on which said encoded data has been stored.

46. The decoding control method according to claim 44, wherein said decoding control list includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning from said start point as said decoding control information.

47. A program for driving a computer to carry out a decoding control process of decoding encoded data obtained as a result of a predictive encoding process wherein said decoding control process comprises the steps of:

controlling processes carried out by a plurality of decoders for decoding said encoded data in order to decode said encoded data in picture units on the basis of a decoding control list describing at least an edit point set in said encoded data and a start point representing a timing to start a process to decode fewest possible pictures, which are not to be displayed but must be decoded first before decoding a picture to be displayed after said edit point as decoding control information for controlling said processes carried out by said decoders for decoding said encoded data in order to decode said encoded data; and

selecting one of pictures, which are obtained as

results of said processes carried out by said decoders, on the basis of said decoding control list and outputting said selected picture.

48. The program according to claim 47, wherein said decoding control process further comprises the step of reading out said encoded data from a recording medium, on which said encoded data has been stored.

49. The program according to claim 47, wherein said decoding control list includes information used for specifying one of said decoders to carry out a process to decode said encoded data beginning from said start point as said decoding control information.